REMARKS

Claims 1-3, 5-21 and 23 are pending.

Claims 1-3, 5-21 and 23 are rejected.

Double Patenting Rejections

The applicants request that the submitting of any terminal disclaimers be done once the present claims are in condition for allowance. At that time, applicants will know the state of the claims and can determine the suitability of such terminal disclaimers.

35 USC § 103 (a)

Claims 1-3, 5-21 and 23 are rejected under 35 USC 103(a) as being unpatentable over Verser, US 6,927,048 in view of Coffey, US 2003/0155091 and further in view of Ovenden and Song.

Verser teaches a fermentation liquor produced in a fermentation process for the production of a ferementation product. Verser further teaches the ethanol is removed from the water stream which is discharged from the column and separated by a simple liquid-solid separation into the solid base fro recycle.

Verser does not teach the treatment system comprises and anionic polymer as presently claimed.

Examiner uses Coffey to teach that dewatering may be done by the use of polymeric flocculants which comprise cationic and anionic monomers. Coffey further teaches that using such polymers for displacing unwanted soluble or colloidal materials from an aqueous cellulosic suspension increases the efficiency of dewatering.

While Coffey does teach polymers formed from about 0.1 to 9.9 mole percent of one or more cationic or anionic monomers and from 0.1 to about 49.9 mole percent, zwitterionic monomers, there is absolutely no suggestion within the bounds of Coffey to form a synthetic polymer encompassed by the present claim limitations. That is, Coffey does not teach a polymer formed from at least 50% by weight anionic monomer units which anionic monomer units are selected from the group consisting of (meth)acrylic acid or salts, maleic acid or salts, itaconic acid or salts and fumaric acid or salts. Thus even if Coffey were to be combined with Verser, and there was some motivation to combine

(applicants strongly object that there is any motivation to combine), one would not arrive at the present claim limitations.

Examiner has curiously relied on Song to teach that "at the time the invention was made it was well known in the art that both the charge density and the molecular weight of an anionic polymer (e.g. polyacrylamide) or cationic polymer can be varied by varying the monomer ratio."

While it is well known to varying monomer ratio of a polymer, the examiner's references have given no guidance as to what that ratio should be and under what circumstances a particular ratio is effective.

First of all, polyacrylamide is not an anionic polymer but a nonionic polymer as pointed out by Song in the first column, lines 7-9, page 1101.

Secondly, while Song teaches that a charged polyacrylamide will be more effective as a flocculant, Song teaches that the charged polyacrylamides are **cationic**. Song makes no statements which would teach or suggest the use of an **anionic** polyacrylamide in papermaking. The purpose of Song is to explore cationic copolymers of acrylamide and acryloxyloxyethyl dimethylbenzyl ammonium chloride. See Introduction and abstract of Song.

Examiner further relies on Ovenden who allegedly teaches improved flocculation efficiency using the synergy between cationic polymer (CM) and anionic polymer (Abstract. Examiner points to the table at the bottom of page 226, as teaching anionic polyacrylamide of various charge densities.

Applicants point out that Ovenden's alleged cationic polymer (CM) is not a polymer at all but inorganic cationic microparticules. While Ovenden teaches anionic polyacrylamide as a flocculant in solids removal in waste water treatment an in fine solids retention in papermaking processes, Ovenden's description of the anionic polyacrylamide as medium anionic or low anionic does not suggest what weight % of the polyacyrlamide is formed from anionic monomer units nor does it suggest which anionic monomers are used to form the anionic polyacrylamide.

Thus the combination of Verser with Coffey and further in view of Song and Ovenden does not suggest the present claim limitations. The rejection is completely deficient in regard to the use of an anionic polymer formed from at least 50 wt. % anionic monomer units which anionic monomer units

are selected from the group consisting of (meth)acrylic acid or salts, maleic acid or salts, itaconic acid or salts and fumaric acid or salts.

Applicants further believes that it is important to point out that while it is well known to vary monomer ratio of a polymer, the examiner's references provide no guidance as to what that ratio should be and under what circumstances a particular ratio is effective. The references relied on do not teach with any specificity the presently claimed invention even when combined.

Some comments are necessary by the applicants to address the examiner's statement that "the charge density and the molecular weight of an anionic polymer or cationic polymer can be varied and that a person skilled in the art at the time the invention was made would have recognized that the charge density and intrinsic viscosity of the charged polymer (cationic and anionic) were result effective variables and could have been optimized".

This statement trivializes almost all inventions relating to the use of particular polymers for a specific purposes. Because one skilled in the art recognizes that polymers may be varied in many different ways (Mw, Mn, charge, crosslinking etc.), does render obvious the use of a particular polymer for a specific use. **In other words because one skilled in the art knows how to make many different kinds of polymers does not in any way provide a solution to which polymer should be used in which application.**

Two References Attached

Applicants enclose two references which describe PERCOL E24 (See page 407, 2nd col., section 2.1) and PERCOL 173 (See submitted MSDS, second page under Chemical Family). Both documents are published later than the priority date of the present application but should be admissible for clarifying the specific makeup of the two anionic polymers mentioned in Ovenden (table 1).

PERCOL E24 is an anionic polyacrylamide-based copolymer having a content of 15 % polyacrylate units.

PERCOL 173 is anionic polyacrylamide-base copolymer having a content of 5% of polyacrylate units.

Applicants submit that the present application is in condition for allowance. In the event that minor amendments will further prosecution, Applicants request that the examiner contact the undersigned representative.

Respectfully submitted,

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Enclosures: MSDS sheet for PERCOL E24 and Huining, Xian, et al., *J. of Colloid and Interface Science* 283,(2005), 406-413.